What is claimed:

1. A tooth whitening composition comprising:

a transparent first component being a carrier compound; and

a transparent second component being an oxidizing compound which when applied to a stained tooth and exposed to actinic light is activated to facilitate tooth whitening.

2. A tooth whitening composition of claim 1 further comprising a third component being a photoactivating agent which when exposed to actinic light enhances the activation of said second component to facilitate tooth whitening.

3. A composition as set forth in claim 1 wherein said first component is a gel of carboxypolymethylene.

4. A composition as set forth in claim 1 wherein said second component contains either a peroxide or peroxyacid.

5. A composition as set forth in claim 4 wherein said peroxide is selected from a group consisting of hydrogen peroxide, carbamide peroxide, alkali metal peroxide, alkali metal percarbonate, and alkali metal perborate.

6. A composition as set forth in claim 4 wherein said peroxyacid precursor is selected from a group consisting of glyceral triacetate, acetylated amino acids, acetylsalicylic acid and tretraacetylethyldiamine.

7. A composition as set forth in claim 1 wherein said first and second components transmit about 70% of the applied energy upon exposure to light.

8. A composition as set forth in claim 1 wherein said first and second components do not substantially absorb light having a range of wavelengths of from about 350 nanometers to about 700 nanometers.

9. A composition as set forth in claim 8 wherein said first and second components do not substantially absorb light having a range of wavelengths of from about 380 nanometers to about 500 nanometers.

10. A composition as set forth in claim 2 wherein said photoactivating component absorbs light having a range of wavelengths from about 350 nanometers to about 700 nanometers and converts that energy into thermal or chemical energy.

11. A composition as set forth in claim 10 wherein said photoactivating component absorbs light having a range of wavelengths from about 380 nanometers to about 500 nanometers.

12. A composition as set forth in claim 2 wherein said photoactivation component is of molecular size, pH and surface charge to allow for effective penetration into the structure of the enamel and dentin.

13. A composition as set forth in claim 2 wherein said photoactivating component is selected from a group consisting of semiconductor particles, benzophenone derivatives, benzotriazole derivatives, diketones, metal-ligand complexes, and phthalocyancin-metal complexes.

14. A composition as set forth in claim 13 wherein said semiconductor particles are nanometer sized oxides of titanium or zinc.

15. A method for light-activated tooth whitening comprising the steps of:

applying a tooth-whitening composition containing a transparent carrier compound and a

transparent oxidizing compound which when in contact with the surface of a stained tooth and exposed to actinic light is activated to facilitate tooth whitening to one or more teeth; and

exposing said composition to actinic light to activate said oxidizing compound.

16. A method for light-activated tooth whitening comprising the steps of:

applying a photosensitizing agent which absorbs actinic radiation when in contact with the surface of a tooth to one or more teeth;

applying an tooth-whitening composition containing a transparent carrier compound and a transparent oxidizing compound capable of facilitating tooth whitening on top of said photosensitizing agent; and

exposing said photosensitizing agent and said tooth-whitening composition to actinic light to activate said oxidizing compound.

17 . A method as set forth in claim 15 wherein said light source emits light having a range from about 350 nanometers to about 700 nanometers.

18. A method as set forth in claim 17 wherein said light source emits light having a range from about 380 nanometers to about 500 nanometers.

19. A method as set forth in claim 16 wherein said photosensitizing agent absorbs light having a range of wavelengths from about 350 nanometers to about 700 nanometers and converts that energy into thermal or chemical energy.

20. A method as set forth in claim 19 wherein said photosensitizing agent absorbs light having a

range of wavelengths from about 380 nanometers to about 500 nanometers.

21. A method as set forth in claim 16 wherein said photosensitizing agent is of molecular size, pH and surface charge to allow for effective penetration into the structure of the enamel and dentin.

22. A method as set forth in claim 16 wherein said photosensitizing agent is selected from a group consisting of nanometer sized semiconductor particles, benzophenone derivatives, benzotriazole derivatives, diketones, metal-ligand complexes, and phthalocyancin-metal complexes.

23. A method as set forth in claim 16 wherein said light source emits light having a range from about 350 nanometers to about 700 nanometers.

24. A method as set forth in claim 23 wherein said light source emits light having a range from about 380 nanometers to about 500 nanometers.

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